

CLAIMS

What is claimed is:

- 1 1. A modular water flow system for an aquarium comprising:
2 a pump;
3 a water intake system having at least one inlet wherein the intake
4 system pulls water in through the inlet due to a propulsive force created by the
5 pump;
6 a water return system having at least one outlet wherein the return
7 system permits the water to return to the aquarium from the outlet; and
8 at least one valve assembly to manage at least one of the water return
9 system and the water intake system to regulate a flow rate.
- 1 2. The modular water flow system of claim 1, wherein the water intake
2 system, the water return system, and the at least one valve assembly are coupled by
3 at least one connecting piece.
- 1 3. The modular water flow system of claim 2, wherein the at least one
2 connecting piece further comprises at least one of the following:
3 a coupling bracket;
4 a tee bracket; and
5 an elbow bracket.
- 1 4. The modular water flow system of claim 2, wherein the at least one
2 connecting piece is coupled to an attachment mechanism.
- 1 5. The modular water flow system of claim 4, wherein the attachment
2 mechanism is a suction cup.
- 1 6. The modular water flow system of claim 1 further comprising an
2 overwall assembly unit which couples an interior portion of the modular water flow
3 system to an exterior portion of the modular water flow system via a link.

- 1 7. The modular water flow system of claim 6 wherein the link comprises
2 an inlet port and an outlet port.
- 1 8. The modular water flow system of claim 7, wherein the inlet port is
2 rotatably coupled to the exterior portion of the modular water flow system.
- 1 9. The modular water flow system of claim 7, wherein the outlet port is
2 rotatably coupled to the interior portion of the modular water flow system.
- 1 10. The modular water flow system of claim 1 wherein the valve assembly
2 further comprises:
3 one or more opening; and
4 a regulator which regulates the rate at which the water returns.
- 1 11. The modular water flow system of claim 10, wherein the regulator
2 further comprises an adjustment mechanism to alter the rate at which the water
3 returns.
- 1 12. The modular water flow system of claim 10 further comprising at least
2 one cap which can seal at least one of the one or more openings.
- 1 13. The modular water flow system of claim 1 wherein the at least one
2 valve assembly further comprises at least one attachment that fastens to the at least
3 one opening.
- 1 14. The modular water flow system of claim 13 wherein the at least one
2 attachment includes at least one of:
3 a hydrojet; and
4 a ball/socket assembly.
- 1 15. The modular water flow system of claim 14, wherein the ball/socket
2 assembly comprises a number of interlocking balls and sockets that can be rotated
3 in at least one direction to allow customizability in water flow pattern.

1 16. The modular water flow system of claim 1, wherein the water return
2 system further comprises at least one spray bar having at least one aperture.

1 17. The modular water flow system of claim 1, further comprising at least
2 one pipe connected on each end by at least one connecting piece and located
3 between the water intake system and the water return system.

1 18. A modular water flow system for an aquarium comprising:
2 water intake means;
3 water return means; and
4 means for adjusting water return rate.

1 19. The modular water flow system of claim 18, further comprising:
2 a means for removing water from an interior portion of an aquarium to
3 an exterior portion of the aquarium;
4 a means for returning water to the interior portion of the aquarium from
5 the exterior portion of the aquarium;
6 a connection means for coupling the interior portion to the exterior
7 portion of the aquarium.

1 20. The modular water flow system of claim 19, further comprising means
2 for swiveling the connection means to facilitate positioning of the system.

1 21. An overwall assembly unit comprising:
2 an interior portion through which water can travel;
3 an exterior portion through which water can travel;
4 a link through which water can travel;
5 the exterior portion being rotatably coupled to the interior portion via
6 the link;
7 the link further comprises an inlet port that the interior portion can be
8 rotatably coupled thereto; and
9 the link further comprises an outlet port that the exterior portion can be
10 rotatably coupled thereto.

1 22. At least one valve assembly to manage at least one of a water return
2 system and a water intake system to regulate a flow rate comprising:
3 at least one opening; and
4 a regulator which regulates the flow rate.

1 23. The at least one valve assembly of claim 22, wherein the regulator
2 further comprises an adjustment mechanism to alter the flow rate.

1 24. The at least one valve assembly of claim 22, further comprising at least
2 one cap which can seal at least one of the openings.

1 25. The at least one valve assembly of claim 22, further comprising at least
2 one attachment that fastens to at least one of the openings.

1 26. The at least one valve assembly of claim 25 wherein the at least one
2 attachment includes at least one of:
3 a hydrojet; and
4 a ball/socket assembly.

1 27. The at least one valve assembly of claim 26, wherein the ball/socket
2 assembly comprises a number of interlocking balls and sockets that can be rotated
3 in at least one direction to allow customizability in water flow pattern.

1 28. A kit for assembly of a modular water flow system for an aquarium
2 comprising:
3 a water intake system having at least one inlet adapted to pull water in
4 through the inlet due to a propulsive force;
5 a water return system having at least one outlet adapted to permit the
6 water to return to the aquarium from the outlet;
7 at least one valve assembly connectable to manage at least one of the
8 water return system and the water intake system to regulate a flow rate;
9 at least one connecting piece; and
10 at least one pipe;

11 wherein the at least one connecting piece, the water intake system, the
12 water return system, the valve assembly, and the pipe can be interchangeably
13 connected in a modular way to allow the kit to be set up to create a water flow
14 pattern as desired by an aquarist.

1 29. The kit for assembly of a modular water flow system for an aquarium of
2 claim 28 further comprising at least one overwall assembly unit wherein the overwall
3 assembly unit can be interchangeably connected in a modular way to the water
4 intake system, the water return system, the valve assembly, the connecting piece,
5 and the pipe.